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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/256,346	02/24/99	TAKATORI K	Q053397

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SUGHRUE MION ZINN MACPEAK & SEAS
2100 PENNSYLVANIA AVENUE N W
WASHINGTON DC 20037-7060

EXAMINER	
NELSON, A	
ART UNIT	**PAPER NUMBER**
2675	11

DATE MAILED: 08/28/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

PTO-90C (Rev. 2/95)
*U.S. GPO: 2000-473-000/44602

1- File Copy

Office Action Summary

Application No.	Applicant(s)
09/256,346	Takatori et al.
Examiner	**Art Unit**
Alecia Nelson	2675

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *three* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *Jun 20, 2001* .

2a) ☒ This action is **FINAL.** 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☒ Claim(s) *1-9 and 16-19* is/are allowed.

6) ☒ Claim(s) *10-15* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) ☐ Notice of References Cited (PTO-892)
16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
18) ☐ Interview Summary (PTO-413) Paper No(s). _____
19) ☐ Notice of Informal Patent Application (PTO-152)
20) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada et al. (U.S. Patent No. 4,800,382) in view of Kamiya et al. (U.S. Patent No. 4,694,348).

Okada et al. teaches a driving method for a liquid crystal device of the type comprising a matrix electrode structure having scanning lines and data lines. In the driving method, in a first period, a scanning selection signal is applied to a scanning line and applying an information signal is applied to a data line in synchronism with the scanning selection signal, and in a second period

an alternating auxiliary signal is applied to the data line (see abstract). It is also taught, with reference to figure 6, that all or a part of the picture elements on the whole picture written in the previous field or frame is erased at the same time and then successively written (see column 5, lines 59-63).

Okada et al. fails to specifically teach or suggest writing data a plurality of times in first field of the frame and writing data a plurality of times of a second field of the frame for a single display element.

Kamiya et al. teaches a method of driving a liquid crystal display panel in which a total of six scanning lines consisting of three scanning lines of a first field and three scanning lines of a second field, two scanning lines are displayed by the action of a first scanning electrode, while another two scanning lines are displayed by the action of a second scanning electrode. More specifically, an odd-numbered scanning line of one field and a corresponding odd-numbered scanning line of the immediately succeeding field are displayed by the action of a first scanning electrode, with the succeeding even numbered scanning lines of the first field being omitted, while an even number scanning line of the second field and the next odd number scanning line of the first field are displayed by the action of a second scanning electrode adjacent to the first scanning electrode, while a succeeding odd-numbered scanning line of the second field is omitted (see column 5, lines 55-column 6, lines 8).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to include the that which is taught by Okada et al. and Kamiya et al. to thereby

provide a driving method for a liquid crystal device having improved display and driving characteristics.

With reference to ***claims 12-15***, Okada et al. teaches all that is required as explained above, however fail to teach that data corresponding to the three colors are successively displayed.

Kamiya et al. teaches a method of driving a liquid crystal display panel whereby each set of six scanning lines consisting of three successive lines of one field and three corresponding lines of the succeeding field. Three lines are displayed by display elements driven by one scanning electrode and the remaining three lines by display elements are driven by an immediately adjacent scanning electrode (see column 10, lines 3-19). It is further taught that this driving method is applicable to black-and-white television displays and to color displays (see column 10, lines 20-24).

Therefore it would have been obvious to one having ordinary skill at the time of the invention to divide the scan lines into a plurality of blocks, as taught by Kamiya et al., and simultaneously drive the plurality of blocks with the method taught by Okada et al. to thereby provide that the resolution of a display be less visible of flicker to the eye of an observer.

Allowable Subject Matter

2. ***Claims 1-9 and 16-19*** are allowed.

3. The following is a statement of reasons for the indication of allowable subject matter: None of the references either singularly or in combination teach or fairly suggest scanning successively the scan lines in a second field of the framed for display in an order reverse to that in the first field. Specifically Okada et al. teaches all the features of the claims but does not suggest scanning the scan lines in the second field in an order reverse to that in the first field. None of the reference make up for this deficiency.

Response to Arguments

4. Applicant's arguments filed 6/20/2001 have been fully considered but they are not persuasive.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any response to this action should be mailed to: Commissioner of Patents and Trademarks Washington, D.C. 20231; or faxed to (703)309-9051, (for formal communications intended for entry) or: (703)308-6606 (for informal or draft communications, please label "PROPOSED or DRAFT). Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive Arlington, VA., Sixth floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alecia D. Nelson whose telephone number is (703)305-0143.

If attempts to reach the above examiner by telephone are unsuccessful, the examiner's supervisor, Steve Saras, can be reached at (703)305-9720.

adn/ADN
August 26, 2001

DENNIS-DOON CHOW
PRIMARY EXAMINER